

Amendment Request to add Option 2 to the previously issued License #21-26253-01

Today Dated: August 15, 2025

On July 11, 2025, an amendment request for license #21-26253-01 was sent to the NRC which included two options for the Kr-85 source installation into the gauge unit in response to question 3 by the NRC reviewer. These two methods are repeated below for clarity. The license that was received by email on July 16, 2025, excluded Option 2 as it was determined by the NRC that the SSD certificate no. NR-1521-D-101-G would have to be amended to include Option 2. An SDDR amendment request was submitted by email on July 18, 2025, and the amended SDDR was received back from the NRC by email on July 30, 2025. We are now requesting that license #21-26253-01 be amended to include Option 2 as detailed below.

Q3. Please provide procedures to install the Kr-85 source into the device

RADIOLOGICAL PHYSICS SERVICE INC. RESPONSE:

Installation of the source box is coordinated with the customer site management team. Under supervision of Radiological Physics Service authorized user, installation of the Kr-85 Source Box is performed by an experienced, well-trained manufacturer's engineer with prior experience worldwide performing many source box installations in the same model thickness gauging equipment.

There are two options for delivery of the source to the customer site, either 1) the source is delivered pre-installed in the source box or 2) delivered separately in its own container to be installed into the source box which is delivered with the gauge unit.

Source Installation for Option 1:

1. Installation of Source into Source Box: The source is installed into the source box at the manufacture's site in China. The source box with the pre-installed source is sent to the customer site in the United States.
2. Place the Source Box into the Gauge: Open the Gauge unit cabinet door. Install the Kr-85 source box matching the Gauge unit equipment plugs with the source box plugs for proper alignment. Tighten screws and close the cabinet door.

Source Installation for Option 2:

Step 1. Pre-installation. The designated source box installation engineer dons designated protective clothing provided for source box installation. Protective clothing includes a lead suit, leaded gloves, and leaded eyeglasses. The beta-ray source box has been shipped to

the customer site in a DOT Type A shipping package, a wooden box. The wooden box is brought to an unoccupied location with a circular area of 30 square meter radiation exclusion area, and the shielded pig containing the Kr-85 source is taken out of the shipping box and placed on a worktable.

Step 2. Removal of Sealing Plates. An Allen wrench is used to remove the side covers and the top protective film of the source box to be loaded.

Step 3. Setting the Source Rotation Configuration. Manually rotate the internal rotating structure of the β -ray source box to the designated start position. Apply supplied screws to secure the rotating position.

Step 4. Kr-85 Source Installation. Remove the Kr-85 source stopper from the beta-ray shipping pig to make sure the internal mounting spring is free and springy. Use provided remote tools. Remove the radioactive source from the lead cylinder and install the radioactive source inside the source box with the window side facing up. Retighten the source holder of the beta-ray source box to its original position.

Step 5. Restore the Rotating Source to its OFF Position. Manually remove the screw that secures the position of the rotary source box; after unscrewing, the rotary source box will automatically reset to the closed state. Reinstall the source box side panels and top protective film.

Step 6. Place the Source Box into the Gauge. Open the Gauge unit cabinet door. Install the Kr-85 source box matching the Gauge unit equipment plugs with the source box plugs for proper alignment. Tighten screws and close the cabinet door.


Ray A. Carlson, MS, RSO

Date: 8 / 15 / 25

Martha Pavon

From: Magdalena Gryglak
Sent: Friday, August 15, 2025 1:45 PM
To: Martha Pavon
Cc: Tammy Tomczak; Bob Orlikowski
Subject: FW: Re: Amendment Request to add new services for Radiological Physics Service, Inc. - NRC license no. 21-26253-01
Attachments: Amendment Request License #21-26253-01.pdf

Hello Martha,

Please process the amendment request.

Tammy, please assign to me.

Thank you

Magda

From: Ray Carlson <rayacarlson@att.net>
Sent: Friday, August 15, 2025 11:34 AM
To: Eric Ramsay <eric.ramsay@versantphysics.com>; Magdalena Gryglak <Magdalena.Gryglak@nrc.gov>
Cc: Darrell Fisher <darrell.fisher@versantphysics.com>
Subject: [External_Sender] Re: Amendment Request to add new services for Radiological Physics Service, Inc. - NRC license no. 21-26253-01

Dear Magdalena,

Please see the amendment request attached.

Ray Carlson